

4. Specification:

Please rewrite the paragraph starting on page 10, line 21 as:

FIG. 8 shows a time-domain representation of a plurality of frequency-domain encoded signals. Each pulse 1, 2, 3, 4, and 5 represents a Carrier Interferometry (CI) signal having three ($M=3$) multi-frequency carrier signals. CI pulses in their basic sinc form are similar to Nyquist pulses. Thus, positioning each pulse such that the pulse maximum corresponds to zeros (i.e., zero-crossings) of the other pulses provides overlapping pulses with minimum inter-symbol interference. In this case, up to $2M$ pulse signals $s_{n=2M}(t)$ having low inter-symbol interference may be provided in the time domain. Other pulse-overlapping strategies may be employed in conjunction with multi-user detection (which typically involves interference cancellation) to increase the capacity of the communication system. This realization may be extended to many different diversity-parameter domains. For example, many types of multicarrier-defined diversity-parameter domains (such as frequency) may be used to generate superposition signals having predetermined characteristics in the time domain. One of the benefits of alternative diversity-parameter processing is that, in some cases, the benefits of both diversity and high bandwidth efficiency can be obtained.